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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,947	01/05/2001	Ranjit Bhatia	27943-00401USP1	4505

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ERICSSON INC.
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EXAMINER

MOORE, JAMES K

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,947

Applicant(s)

BHATIA ET AL.

Examiner

James K Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12-25 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12-25 and 27-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed August 15, 2003 have been fully considered but they are not persuasive.

The Applicant argues that Haumont fails to disclose the steps of filtering received realtime information associated with a particular wireless mobile device and providing to the information service provider only those portions of the received information previously specified and subscribed to by the information service provider. See page 11 of the Amendment. However, the Examiner disagrees. Haumont discloses that the providing means receives realtime information (network information) associated with a particular wireless mobile device, and provides **only** desired information to an information service provider. See page 5, lines 28-36 and page 7, lines 1-5 and 14-28. This reads on the "filtering" and "previously specified" limitations of the claim, because not all of the received realtime information is provided to the information service provider, only the desired information is sent. Furthermore, all of the received realtime information is "subscribed to" by the information service provider, since the service provider must obtain an allowance to access the information in the database. See page 7, lines 5-7.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12, 19, and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "said filter" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "said second network node" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 28 recites the limitation "establishing the pre-configured rules by a subscriber associated with the wireless communications device with the information service provider". It is unclear what is meant by the limitation.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 4-6, 8, 10, 14, 16-18, 20-22, 24, and 27-29 are rejected under 35 U.S.C. 102(a) as being anticipated by Haumont et al. (WO 00/01172).

Regarding claim 1, Haumont discloses a method for facilitating information interexchange between a telecommunications network (GPRS network) serving a wireless communications device (mobile station 1) and an information service provider (5). The method comprises maintaining pre-configured rules associated with the

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wireless communications device (rules governing when to transmit network information to a service provider), receiving realtime information (network information) associated with the wireless communications device from a network node associated with the telecommunications network, and providing the received realtime information to the information service provider automatically upon the receipt thereof based on the pre-configured rules. The step of providing the received realtime information comprises filtering the received realtime information so that the information service provider is only provided with portions of the realtime information previously specified and subscribed to by the information service provider for the wireless communication device. See page 4, lines 22-31 and page 5, lines 6-36. The method may also comprise forwarding content information prepared in accordance with the realtime information by the information service provider to the wireless communications device. See page 7, lines 14-18.

Regarding claim 4, Haumont discloses all of the limitations of claim 1, and also discloses that the realtime information comprises location information associated with the wireless communications device. See page 5, lines 6-13.

Regarding claim 5, Haumont discloses all of the limitations of claim 1, and also discloses that the realtime information comprises an ON/OFF status indication (operating state indicating whether the mobile station is reachable) for the wireless communications device. See page 5, lines 6-13.

Regarding claim 6, Haumont discloses all of the limitations of claim 1, and also discloses that information related to the received realtime information is updated in a database. See page 7, lines 1-7.

Regarding claim 8, Haumont discloses all of the limitations of claim 1, and also discloses that the realtime information is location area information. See page 5, lines 6-13.

Regarding claim 10, Haumon discloses an apparatus for facilitating information exchange between a telecommunications network (GPRS network) serving a wireless communications device (mobile station 1) and an information service provider (5). The apparatus comprises storage means for maintaining pre-configured rules associated with the wireless communications device (rules governing when to transmit network information to a service provider), a receiver (in GGSN 8) for receiving realtime information (network information) associated with the wireless communications device from a network node associated with the telecommunications network, and providing means for providing the received realtime information to the information service provider automatically upon the receipt thereof based on the pre-configured rules. The providing means filters the received realtime information so that the information service provider is only provided with portions of the realtime information previously specified and subscribed to by the information service provider for the wireless communications device. See page 4, lines 22-31 and page 5, lines 6-36. The apparatus may also comprise means for forwarding content information prepared in accordance with the realtime information by the information service provider to the wireless communication device. See page 7, lines 14-18.

Regarding claim 14, Haumont discloses all of the limitations of claim 10, and also discloses that the apparatus may comprise a database containing information related to the received realtime information. See page 7, lines 1-7.

Regarding claim 16, Haumont discloses all of the limitations of claim 10, and also discloses that the realtime information is location area information. See page 5, lines 6-13.

Regarding claim 17, Haumont discloses a method for reporting realtime information by a network node associated with a telecommunications network (GPRS network) and serving a wireless communications device (mobile station 1) therein. The method comprises monitoring, by the network node, realtime information (network information) related to a subscriber associated with the wireless communications device, and providing the received realtime information to a B2B engine (providing means 7) configured to automatically forward the realtime information to an information service provider (5). See page 4, lines 22-31 and page 5, lines 6-36. The realtime information may be used in providing content information prepared in accordance with the realtime information by the information service provider to the wireless communications device. See page 7, lines 14-18. The providing step is initiated by an update to the realtime information detected by the network node, and the B2B engine provides portions of the realtime information previously specified and subscribed to by the information service provider for the wireless communications device. See page 5, lines 28-36.

Regarding claim 18, Haumont discloses all of the limitations of claim 17, and also discloses that, prior to the providing step, the method may comprise forwarding the realtime information by the network node (where the network node is an HLR) to another network node (GGSN 8) and that the other network node provides the realtime information to the B2B engine. See page 5, lines 28-36.

Regarding claim 20, Haumont discloses all of the limitations of claim 17, and also discloses that the provided realtime information may be sent to a content provider, thereby enabling a content provider service to the subscriber. See page 2, lines 7-12.

Regarding claim 21, Haumont discloses a telecommunications system (GPRS network) for providing realtime information. The system comprises a first network node for monitoring realtime information (network information) related to a subscriber associated with a wireless communications device (mobile station 1) within the telecommunications system to detect a change in the realtime information, and a B2B engine (providing means 7) interfaced to the first network node to receive the realtime information from the first network node upon detection at the first network node of the change in the realtime information. The B2B engine automatically forwards the realtime information to an information service provider. See page 4, lines 22-31 and page 5, lines 6-36. The realtime information may be used in providing content information prepared in accordance with the realtime information by the information service provider to the wireless communications device. See page 7, lines 14-18. The B2B engine comprises means for filtering the received realtime information to provide the information service provider with certain portions of the realtime information previously

specified and subscribed to by the information service provider for the subscriber. See page 5, lines 28-36.

Regarding claim 22, Haumont discloses all of the limitations of claim 21, and it is inherent that the first network node comprises a monitoring agent for monitoring the realtime information. See page 5, lines 6-13.

Regarding claim 24, Haumont discloses all of the limitations of claims 17 and 21, and also discloses that the system comprises a second network node (HLR) connected to the first network node (GGSN 8), that the second network node monitors the realtime information (reachability) related to the subscriber and provides the information to the first network node, and that the information is forwarded by the first network node to the B2B engine. See page 5, lines 28-36.

Regarding claim 27, Haumont discloses all of the limitations of claim 21, and also discloses that the realtime information is location area information. See page 3, lines 34-38 and page 5, lines 6-13.

Regarding claim 28, Haumont discloses all of the limitations of claim 1, and also discloses that the pre-configured rules are stored within a B2B engine (providing means 7) associated with the telecommunications network. See page 5, lines 15-36.

Regarding claim 29, Haumont discloses all of the limitations of claim 1, and also discloses that content information is forwarded to the wireless communications device in a message. See page 7, lines 14-18. There is nothing to suggest that the invention does not encompass forwarding the content information to the wireless communication device in a message while the wireless communications device is idle.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 3, 13, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haumont et al. in view of well known prior art.

Regarding claims 3 and 13, Haumont discloses all of the limitations of claims 1 and 10, but does not disclose that the realtime information is received at periodic intervals. However, it is a well known practice in the art to receive realtime information (e.g., location information) at periodic intervals, in order to ensure that the information is relatively current. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haumont, such that the realtime information is received at periodic intervals, in order to ensure that the information is relatively current.

Regarding claim 23, Haumont discloses all of the limitations of claim 21, and also discloses that the system comprises an interface between the B2B engine (providing means 7) and the first network node (MSC 3, SGSN 6, or GSGN 8). See page 4, lines 33-39. Haumont does not disclose that the interface uses a MAP protocol. However, it is well known in the art that the MAP protocol is a standard protocol commonly used in mobile networks for transmitting signaling information between nodes within a mobile network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haumont, such that the interface uses a MAP protocol,

so that the invention may be used in existing mobile networks without requiring a modification of signaling protocols.

8. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haumont et al. in view of Sonti et al. (U.S. Patent No. 6,108,540).

Regarding claim 7, Haumont discloses all of the limitations of claim 6, but does not disclose that the updating step comprises validating an event related to the realtime information or storing the validated event in the database. Haumont does disclose, however, that the realtime information may be a cell location. See page 5, lines 6-13. In addition, Sonti discloses a telecommunications network comprising a database (an HLR) in which information related to a cell location (Last Registered Cell (LOC)) is updated. The updating comprises validating an event (registration) related to the cell location information, and storing the validated event in the database. See col. 4, line 66 through col. 5, line 7 and col. 6, line 45 through col. 7, line 15. One of ordinary skill in the art recognizes that such validation prevents an unauthorized user from accessing the telecommunications network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haumont with Sonti, such that the updating step comprises validating an event (registration) related to the realtime information and storing the validated event in the database, in order to prevent unauthorized users from accessing the telecommunications network.

Regarding claim 15, Haumont discloses all of the limitations of claim 14, but does not disclose that the apparatus comprises an updating means for updating the

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information associated with the received realtime information which comprises validating means for validating an event related to the realtime information or storing means for storing the validated event in the database. Haumont does disclose, however, that the realtime information may be a cell location. See page 5, lines 6-13. In addition, Sonti discloses a telecommunications network comprising a database (an HLR) in which information related to a cell location (Last Registered Cell (LOC)) is updated by updating means. The updating comprises validating an event (registration) related to the cell location information with validating means, and storing the validated event in the database with storing means. See col. 4, line 66 through col. 5, line 7 and col. 6, line 45 through col. 7, line 15. One of ordinary skill in the art recognizes that such validation prevents an unauthorized user from accessing the telecommunications network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haumont with Sonti, such that the apparatus comprises an updating means for updating the information associated with the received realtime information which comprises validating means for validating an event related to the realtime information and storing means for storing the validated event in the database, in order to prevent unauthorized users from accessing the telecommunications network.

9. Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haumont et al. in view of Jokela et al. (WO 99/45732).

Regarding claims 9 and 12, Haumont discloses all of the limitations of claims 1 and 10, but does not disclose that the wireless communications device is registered to

receive data from the information service provider. However, Jokela teaches registering a wireless communications device to receive data from an information service provider. See page 13, lines 10-15. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haumont with Jokela, such that the wireless communications device is registered to receive data from the information service provider, in order to prevent fraudulent use of the information service provider's services by users who do not pay for a subscription to the services.

10. Claims 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haumont et al. in view of Alvesalo (U.S. Patent No. 5,384,824).

Regarding claim 19, Haumont discloses all of the limitations of claim 17, but does not disclose that the network node which monitors the realtime information is a VLR. However, Haumont does disclose that the realtime information may be location information (see page 5, lines 6-13), and Alvesalo teaches that a VLR is a network node which is a source of location information (see col. 4, lines 6-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haumont with Alvesalo, such that the network node is a VLR, in order to take advantage of existing network architectures.

Regarding claim 25, Haumont discloses all of the limitations of claim 24, and also discloses that the first network node which forwards realtime information to the B2B engine may be a HLR, and that the realtime information may be location information. See page 5, lines 6-14 and 28-36. Haumont does not disclose that the second network

node which monitors the realtime information and provides the information to the first network node is a VLR. However, Alvesalo teaches that a VLR is a network node which is a source of location information and that a VLR forwards location information to an HLR for location updating. See col. 4, lines 6-34. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Haumont with Alvesalo, such that the second network node is a VLR, in order to take advantage of existing network architectures.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Moore, whose telephone number is (703) 308-6042. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached at (703) 305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ken Moore

10/20/03

JKM

Marsha D Banks-Harold

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